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## **8/9/15 Gold King Mine Release Update**

- On Aug. 5 while investigating Gold King Mine in Colorado, EPA and State Division of Reclamation Mining and Safety triggered a large release of mine wastewater into Cement Creek. EPA is working closely with first responders and local and state officials to monitor water contaminated by the spill. The spill path flows through 3 of EPA's regions (Region 8 (Colorado/Utah & Southern Ute Tribe); Region 6 (New Mexico), and Region 9 (Navajo Nation). EPA has activated its Emergency Operations System to ensure coordinate on among its regions, laboratories and national program offices in Washington DC. EPA is closely coordinating with the officials in Colorado, New Mexico, Utah, Southern Ute Tribe and Navajo Nation.

For the latest information, photos, and the data when available, visit  
[http://epaosc.org/site/site\\_profile.aspx?site\\_id=11082](http://epaosc.org/site/site_profile.aspx?site_id=11082) .

- **ASPECT**

This morning, EPA's ASPECT (Airborne Spectral Photometric Environmental Collection Technology) flyover observed that the conditions from Farmington to Durango show improvement. While the River remains discolored, a leading edge of the contaminant plume is no longer visible. These visual observations are a useful indicator, however, water quality data will provide the definitive information about river conditions. These aerial photos will be available in the next day or two at <http://epaosc.org/goldkingmine>.

Water quality data continues to be collected and evaluated. This morning EPA released a detailed data table of the sampling in Cement Creek and the upper portions of the Animas River from August 5, the date of the incident, and August 6. The data table contains a list of analyzed constituents, largely metals, and their numeric value in micrograms per liter, which is equal to parts per billion, or ppb.

We acknowledge frustration with the turnaround time for this information. Collection, transport and lab analysis of metals in water is complex and time consuming. Workers at the lab and data experts are working continuously to develop the information.

The incident, which occurred on August 5, caused a spike in concentrations of total and dissolved metals as the contaminated mine water moved downstream. These concentrations began to trend toward pre-event conditions by August 6. August 7 and 8 data, when it is available, will inform whether the trend towards pre-event conditions continues.

Link to data table: <http://epaosc.org/goldkingmine> (under “documents”)

- **□□□□□□□□ Discharge estimates**

USGS measured increased flows at a stream gage starting at about 12:30 PM and ending about 7:15 PM. This resulted in a provisional calculated flow volume of 3,043,067 gallons discharged from the Gold King Mine. EPA's original estimate of 1 million gallons discharged from the Gold King Mine was based on an estimate of the size of the adit. A stream gage is an instrument that measures volume by measuring flow, which is much more precise.

- **□□□□□□□□ EPA Resources dedicated to the response**

Region 8 has two OSCs in Durango – one in Silverton plus two more on the way. Two PIOs are also on site in Durango. The region has tapped into several contracting mechanisms to provide support for the response totaling 12 contractors on site which includes water quality sampling, drinking water and agricultural water distribution as well as construction and maintenance of the water treatment ponds. Several incident management team positions will be deployed to Durango on Monday. In the Regional office in Denver, there are 21 employees and one contractor providing support services to the response.

EPA Region 6 has a team of two federal on-scene coordinators, two water quality experts and ten technicians and contractors responding to the spill as it reaches communities in the New Mexico. Yesterday, EPA collected water quality samples from nine locations in the river near intakes for Aztec, Farmington, Lower Valley Water Users Association, Morning Star Water Supply System and the North Star Water User Association. Each of these locations will continue to monitor as the spill makes its way past these areas. In the San Juan River, the spill is moving at about 2.5 miles per hour and as of 3 pm yesterday it had reached Nenahnezad, NM, approximately 9 miles

west of Farmington. EPA's Mobile Command Post will arrive in Farmington today.

EPA Region 9 has two Community Involvement Coordinators (CICs) who are deploying to Farmington today. The CICs will plan to meet with local Navajo Chapter officials and prepare to host public meetings in the coming days. The CICs will partner with NNEPA and NN Department of Public Safety to ensure comprehensive outreach to all affected Navajo Chapters. One On Scene Coordinator is also arriving Monday and 2 more will arrive Wednesday.

One OSC is in the Durango Incident Command Post to coordinate Navajo field activity updates and results with Region 8. The Region has also deployed a Public Information Officer (PIO) to participate in a Joint Information Center (JIC), presently in Durango.

The discharge has moved quickly and is still in the vicinity of the Navajo Nation boundary, near Kirtland, NM. Navajo officials have reacted quickly, assessing their well fields and drinking and irrigation water intake systems and issuing a precautionary "do not use" public service announcement regarding water from potentially impacted sources. Region 9 held a conference call today with Navajo Nation EPA (NNEPA) and Navajo Department of Public Safety.

The Navajo EPA surface water monitoring program (Shiprock Office) collected water and sediment samples from the San Juan River yesterday - prior to the spill impact. Region 9 provided 2 START contractors and 4 additional personnel are en route to coordinate and conduct increased sample collection and lab analysis in conjunction with NNEPA.

-  **List of work with local, tribal, state and federal agencies**

EPA Region 8 is coordinating the incident with EPA Regions 6 and 9, the States of Colorado, Utah and New Mexico, and the Navajo Nation and Southern Ute Tribes as well as the San Juan County, City of Durango and the Town of Silverton.

EPA Region 8 is coordinating with ATSDR in response to public health concerns/questions associated with the mine waste plume. ATSDR has been in communication with local health officials at San Juan County Basin Health Department in Colorado.

The Colorado Fish and Wildlife Conservation Office is monitoring effects on wildlife and aquatic life in the affected area. The Colorado Department of Public Health and the Environment

is assisting with drinking water concerns.

EPA Region 8 is working with US Fish and Wildlife Service and the US Geological Service.

EPA Region 9 has is working with the Navajo Nation and the Bureau of Indian Affairs.